

ABSTRACT OF THE DISCLOSURE

A color reproduction system includes a tristimulus value calculation unit for calculating tristimulus values (X, Y, Z) under observation illumination light corresponding to the spectral reflectance of an object, which is obtained by a spectral reflectance calculation unit, and a color image signal calculation unit for calculating output color image signals (R', G', B') to a CRT monitor on the basis of the tristimulus values (X, Y, Z). The tristimulus value calculation unit converts spectral reflectance image data (F) of the object into tristimulus value image data (X, Y, Z) under the observation illumination light using the spectral reflectance data of a color chip formed from a plurality of unit color chips, color chip image data (P') obtained by sensing the color chip with a digital camera under the observation illumination light, spectral sensitivity data of the digital camera, and color matching function data.